



VIA FIRST CLASS MAIL

<b>DECLARATION OF HERBERT F. CATTELL UNDER 37 C.F.R. § 1.132</b>  Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	09/919,555
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	First Named Inventor	Herbert F. Cattell
	Examiner	Betty J. Forman
	Group Art	1634
	Title	<i>Chemical Array Reading</i>

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Sir:

I, Herbert F. Cattell, declare and say as follows:

1. I am a named inventor on U.S. Patent Application Publication No. 2002/0102559, "Chemical Array Fabrication and Use."
2. I am a named inventor on U.S. Patent No. 6,180,351, "Chemical Array Fabrication with Identifier."
3. I am also a named inventor on the above referenced U.S. Application Serial No. 09/919,555.
4. U.S. Application Serial No. 09/919,555 is currently being rejected under 35 U.S.C. § 102(e) over the 2002/0102559 application.
5. U.S. Application Serial No. 09/919,555 is also currently being rejected under 35 U.S.C. § 102(e) over the 6,180,351 patent.
6. It is my understanding that the portion of the 2002/0102559 application that is at issue is found on pages 7-8, paragraphs [0043] and [0044]:

[0043] At the user station of FIG. 5, the resulting package 340 is then received from the remote fabrication station. A sample, for example a test sample, is exposed to the array 12 on the array unit 15 received in package 340. Following hybridization and washing in a known manner, the array unit 15 is then inserted into holder 161 in scanner 160 for reading of the array (such as information representing the fluorescence pattern on the array 12). The array identifier is also machine read by the reader 163 in scanner 160 reading (501) the bar code 356 present on the array substrate 10 in association with the corresponding array 12, while the array unit 15 is still positioned in retained in holder 161. Using read identifier 356 (or biopolymer identification information), processor 162 may then retrieve (502) the first set of feature characteristic data for the array either from portable storage medium 324b or from the database of such information in memory 141 by communicating the array identifier to that database through communication module 164 and communication channel 180 and receiving the corresponding first set of feature characteristic data in response. In the latter situation, processor 162 may obtain the communication address of communication module 144 by which to access memory 141 (or the address of another database carrying the identity map and associated identifier of array 12), from a communication address in identifier 356 or by accessing a database of manufacturer's communication addresses based on the read array identifier (either from a local memory or by communication with a remote database). Processor 162 may retrieve (504) the updated set of feature characteristic data (470) in any of the same ways the first set of feature characteristic data is obtained, although this may be obtained at the same, earlier, or later time. The retrieved first and updated sets may optionally be merged by replacing feature characteristic data from the first set for a given feature with corresponding data from the update set when the first set data conflicts with the updated set data. For example, if the first set indicates a particular feature is present and the updated set indicates that it is not, the merged data indicates that feature is not present. Thus, when use of the first and updated sets is referenced in reading or processing read data from the array, this may be done by way of using the merged data.

[0044] The array in array unit 15, while still positioned in holder 161, may be read to obtain read results. Processor 162 may cause the array to be read, or the data obtained from reading to be processed (which term includes interpretation of data), (510) using the retrieved first and updated feature characteristic sets. For example, if the sets together indicate a particular feature is missing or severely defective then the scanner may simply avoid reading such a feature at all. Alternatively, the read data from such a feature may simply be deleted or ignored in any subsequent processing, or processed results flagged as possibly being in error due to that defective feature. As mentioned, the first and/or updated sets may include biopolymer identification information, and this can also be used to retrieve an additional updated set of array feature characteristic data from one or more other local or remote locations (by communication of the biopolymer identifications and receiving in response, the updated set). Results from the array reading can be processed results, such as obtained by rejecting a reading for a feature which is below a predetermined threshold and/or forming conclusions based on the pattern read from the array (such as whether or not a particular target sequence may have been present in the sample). The results of the reading (processed or not) can be forwarded (such as by communication) to be received at a remote location for further evaluation and/or processing, or use, using communication channel 180 or reader/writer 186 and medium 190. This data may be transmitted by others as required to reach the remote location, or re-transmitted to elsewhere as desired.

7. It is my understanding that the portion of the 6,180,351 patent that is at issue is found at Column 11, beginning on line 62:

At the user station, the resulting package is then received from the remote fabrication station. Second reader 182 is used to read from package 340 the second copy of the local identifier 356. In this case, the corresponding unique identifier 358 is retrieved by second reader 182 also reading it from the package. These are stored in memory 184 in association with one another. A sample, for example a test sample, is exposed to the array 12 on the array unit 15 received in package 340. The array is then inserted into scanner 160 and interrogated by it to obtain interrogation results (such as information representing the fluorescence pattern on the array 12). The first reader also reads the first copy of the local identifier 356 present on the array substrate 10 in association with the corresponding array 12. Processor 162 retrieves the array layout information for the array corresponding to this read first copy of the local identifier 356, by accessing from memory 184 the corresponding unique identifier (which was previously saved in association with the corresponding unique identifier). From the unique identifier, processor 162 can obtain the array layout information since the array layout information was also previously saved in memory 184 in association with the corresponding unique identifier.

Once processor 162 has the array layout information corresponding to the read first copy of the local identifier 356, it can then control interrogation of the corresponding array by scanner 160 using such information and/or processing scan information to obtain feature information which is then associated with the layout information. For example, the array layout information could indicate that the scanner need not interrogate specific array addresses for a given test, or alternatively information read from that address can be ignored. Following array interrogation, the test sample can be evaluated for the presence of a target based on the results of the interrogation, either by processor 162 or by a user examining the interrogation results. The results of the evaluation, or alternatively the interrogation results (processed or raw data), could be forwarded to a remote location for further evaluation and/or processing using communication channel 180 or reader/writer 186 and medium 190.

8. Under MPEP § 715.01 and §716.10, an uncontradicted "unequivocal statement" from the applicant regarding the subject matter disclosed in an article, patent, or published application will be accepted as establishing inventorship. *In re DeBaun*, 687 F.2d 459, 463, 214 USPQ 933, 936 (CCPA 1982).

9. I unequivocally state that I was the sole inventor of the above subject matter disclosed but not claimed by U.S. Patent Application Publication No. 2002/0102559. To the extent the 2002/0102559 application describes the claimed invention of the present application, it is describing the applicant's own work.

10. I unequivocally state that I was the sole inventor of the above subject matter disclosed but not claimed by U.S. Patent No. 6,180,351. To the extent the 6,180,351 patent describes the claimed invention of the present application, it is describing the applicant's own work.

11. I declare further that all statements made in this Declaration of my own knowledge are true and that all statements made on information and belief are believed to be true and further, that these statements are made with the knowledge that willful statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent granted thereon.

Date: \_\_\_\_\_

By: \_\_\_\_\_

Herbert F. Cattell